

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original) A p-type semiconductor material expressed in a composition formula of $\text{Zn}_{(1-\alpha-\beta-\gamma)}\text{Cu}_\alpha\text{A}_\beta\text{B}_\gamma\text{S}_{(1-x-y)}\text{Se}_x\text{Te}_y$ ($0.004 \leq \alpha \leq 0.4$, $\beta \leq 0.2$, $\gamma \leq 0.2$, $0 \leq x \leq 1$, $0 \leq y \leq 0.2$, and $x + y \leq 1$, A and B are elements selected from Cd, Hg and alkaline earth metals).
2. (original) The p-type semiconductor material according to claim 1, wherein the A is Mg.
3. (original) The p-type semiconductor material according to claim 1, wherein the B is Cd.
4. (original) The p-type semiconductor material according to claim 2, wherein the B is Cd.
5. (currently amended) The p-type semiconductor material according to claim 1 ~~any of claims 1 to 4~~, wherein the semiconductor material contains at least one dopant selected from Cl, Br, I, Al, Ga and In as a compensation dopant and a concentration of the compensation dopant is 10^{17} to 10^{20} cm^{-3} .
6. (currently amended) The p-type semiconductor material according to claim 1 ~~any of claims 1 to 4~~, wherein the semiconductor material has a light absorption coefficient of $5 \times 10^5 \text{ cm}^{-1}$ or less at 470 nm to 750 nm.
7. (currently amended) The p-type semiconductor material according to claim 1 ~~any of claims 1 to 4~~, wherein a volume resistivity of the semiconductor material is equal to or higher than $10^{-4} \Omega\text{cm}$ and is lower than $10^{-3} \Omega\text{cm}$.

8. (currently amended) The p-type semiconductor material according to claim 1 ~~any of claims 1 to 4~~, wherein a carrier concentration of the semiconductor material is equal to or higher than 10^{16} cm^{-3} and is lower than 10^{22} cm^{-3} .

9. (currently amended) A semiconductor device in which the p-type semiconductor material according to claim 1, ~~any of claims 1 to 4~~ constitutes a hole injecting electrode layer in an amorphous phase or a polycrystalline phase.

10. (original) The semiconductor device according to claim 9, wherein the semiconductor device is a light emitting device.

11. (new): The p-type semiconductor material according to claim 2, wherein the semiconductor material contains at least one dopant selected from Cl, Br, I, Al, Ga and In as a compensation dopant and a concentration of the compensation dopant is 10^{17} to 10^{20} cm^{-3} .

12. (new): The p-type semiconductor material according to claim 3, wherein the semiconductor material contains at least one dopant selected from Cl, Br, I, Al, Ga and In as a compensation dopant and a concentration of the compensation dopant is 10^{17} to 10^{20} cm^{-3} .

13. (new): The p-type semiconductor material according to claim 4, wherein the semiconductor material contains at least one dopant selected from Cl, Br, I, Al, Ga and In as a compensation dopant and a concentration of the compensation dopant is 10^{17} to 10^{20} cm^{-3} .

14. (new): The p-type semiconductor material according to claim 2, wherein the semiconductor material has a light absorption coefficient of $5 \times 10^5 \text{ cm}^{-1}$ or less at 470 nm to 750 nm.

15. (new): The p-type semiconductor material according to claim 3, wherein the semiconductor material has a light absorption coefficient of $5 \times 10^5 \text{ cm}^{-1}$ or less at 470 nm to 750 nm.

16. (new): The p-type semiconductor material according to claim 4, wherein the semiconductor material has a light absorption coefficient of $5 \times 10^5 \text{ cm}^{-1}$ or less at 470 nm to 750 nm.

17. (new): The p-type semiconductor material according to claim 2, wherein a volume resistivity of the semiconductor material is equal to or higher than $10^{-4} \Omega\text{cm}$ and is lower than $10^{-3} \Omega\text{cm}$.

18. (new): The p-type semiconductor material according to claim 3, wherein a volume resistivity of the semiconductor material is equal to or higher than $10^{-4} \Omega\text{cm}$ and is lower than $10^{-3} \Omega\text{cm}$.

19. (new): The p-type semiconductor material according to claim 4, wherein a volume resistivity of the semiconductor material is equal to or higher than $10^{-4} \Omega\text{cm}$ and is lower than $10^{-3} \Omega\text{cm}$.

20. (new): The p-type semiconductor material according to claim 2, wherein a carrier concentration of the semiconductor material is equal to or higher than 10^{16} cm^{-3} and is lower than 10^{22} cm^{-3} .

21. (new): The p-type semiconductor material according to claim 3, wherein a carrier concentration of the semiconductor material is equal to or higher than 10^{16} cm^{-3} and is lower than 10^{22} cm^{-3} .

22. (new): The p-type semiconductor material according to claim 4, wherein a carrier concentration of the semiconductor material is equal to or higher than 10^{16} cm^{-3} and is lower than 10^{22} cm^{-3} .

23. (new): A semiconductor device in which the p-type semiconductor material according to claim 2, constitutes a hole injecting electrode layer in an amorphous phase or a polycrystalline phase.

24. (new): A semiconductor device in which the p-type semiconductor material according to claim 3, constitutes a hole injecting electrode layer in an amorphous phase or a polycrystalline phase.

25. (new): A semiconductor device in which the p-type semiconductor material according to claim 4, constitutes a hole injecting electrode layer in an amorphous phase or a polycrystalline phase.

26. (new): The semiconductor device according to claim 23, wherein the semiconductor device is a light emitting device.

27. (new): The semiconductor device according to claim 24, wherein the semiconductor device is a light emitting device.

28. (new): The semiconductor device according to claim 25, wherein the semiconductor device is a light emitting device.